Ecologically Significant Wetlands

in the Flathead, Stillwater, and Swan River Valleys

FINAL REPORT

JUNE 1, 1999

Submitted to

the Montana Department of Environmental Quality

Prepared by
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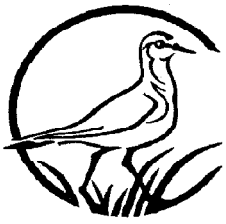

MONTANA
Natural Heritage
Program

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Abstract

The Montana Natural Heritage Program received a wetland protection grant from the Environmental Protection Agency to identify and inventory ecologically significant wetlands and prioritize them for conservation, restoration, and mitigation applications. Much of the state lacks basic information about its wetland resources like National Wetland Inventory maps, and there is even less information available about which of the remaining wetlands are functionally intact and of high quality. This report summarizes the results of a field inventory of high quality wetlands in the Flathead Valley.

The project focused on both public and private wetlands found in the Flathead Lake, Stillwater, and Swan drainages in the Flathead River watershed. We identified potential wetlands for inventory by querying locally knowledgeable individuals, and by using National Wetland Inventory maps, aerial imagery, and agency data. Criteria used to select wetlands for inventory included large size, wetlands without geomorphic or hydrologic modification, presence of intact native plant communities, presence of concentrations of rare plants or animals, and intact uplands. Of the approximately 100 potential wetlands that were identified, 54 appear in this report.

The ecological assessment of each wetland focussed primarily on vegetation, documenting the types of wetland communities present, their quality and condition, and rare or sensitive plant species present. We also recorded information on selected hydrologic and soil variables used in hydrogeomorphic assessments, and the quality/condition of the surrounding landscape as it related to functional integrity.

Our observations indicate that some types of wetlands, like wet meadows and valley bottom riparian communities, have decreased in acreage and quality in the last 150 years, while some types of marsh communities, like cattail communities, are likely more common than they were historically. Peatlands and forested wetlands, such as spruce swamps, are intrinsically rare and provide outstanding habitat for wildlife and rare plants and animals.

The quality and significance of each site was ranked, and sites were placed in one of four categories based on size, wetland condition, upland condition, the diversity of plant communities and wetland features at the site, and presence of rare species and communities. Options and priorities for protecting sites, such as special status designation of public lands or placing sites under conservation easements or in the Wetland Reserve Program, are summarized. Detailed descriptions of wetland sites and communities are presented in appendices. Land managers can apply the process presented here to help evaluate wetlands which were not inventoried.

The wetland information presented here can be used to prioritize wetlands for conservation, identify irreplaceable wetlands, identify reference wetlands, identify potential mitigation sites, provide a context for wetland permit review, and provide information for landuse decisions.